News About Nonpoint Source Issues

Spring 2003

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Trial by Fire

By Cynthia Peterson, Project Manager, Colorado Water Protection Project

The Coalition for the Upper South Platte (CUSP) is a coalition of stakeholders formed in 1998, which includes local governments, federal and state agencies, businesses, water providers and interested individuals. These varied groups work together to protect water quality and other environmental values within the 2,600-square-mile watershed.

The watershed, which extends from the Continental Divide to Strontia Springs Reservoir, southwest of Denver, contains 1.2 million acres of public lands, miles of Gold Medal fishing streams, and habitat for numerous threatened and endangered species. It also provides municipal water for about 75 percent of Colorado's residents. It varies in elevation from about 6,000 feet to over 14,000 feet.

The first order of business for the group was to undertake a comprehensive Data Inventory and Assessment (DIA). The study encompassed data from a number of different federal and state monitoring programs as well as documented pollution sources. It also assessed the ecological health of the river system and prioritized areas for further action.



Based on the DIA, the group began an extensive strategic planning process in 2000. The coalition brought in additional stakeholders and addressed a broad set of issues, including agriculture, fire, land use and development, mining, natural sources, recreation, solid/hazardous waste, stormwater runoff, transportation, underground storage tanks, water rights, water system operations, wastewater treatment plants and septic systems, and noxious weeds.

The group began implementing the work outlined in the strategic plan through education efforts, restoration projects and coordinating monitoring activities in the watershed.

However, the summer of 2002 took the coalition in directions it could not have foreseen.

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On June 8, the Hayman fire was ignited, and normal operations for CUSP were suspended. Although CUSP was impacted by the earlier Snaking and Schoonover fires, the 137,000-acre Hayman fire had an unprecedented impact on the watershed and the group's activities.

After containment of the fire, the U.S. Forest Service looked for a local group to continue the services it had provided through its Hayman Recovery Assistance Center (HayRAC), a one-stop shop delivering information and assistance to individuals and communities affected by the fire. Because of existing working relationships with many of the affected agencies and groups, CUSP was chosen to offer these services to the community for the long term.

CUSP has become the central source of information about the fire, the resultant threat of flooding and restoration efforts. The group has also accepted the role of facilitating cooperation among various federal and state agencies for restoration and recovery work.

In collaboration with other groups, CUSP has coordinated volunteer programs to support community and forest restoration efforts. It directly or indirectly managed approximately 21,000 volunteer hours between August 2 and November 2 last year, including 28 Eagle Scouts and their projects.

Additionally, CUSP facilitated meetings of six subcommittees of a fire recovery steering committee. The subcommittees, which again included a broad range of stakeholders, are: emergency response, environmental rehabilitation, societal issues, fundraising, volunteers and public education.

Funding for CUSP's HayRAC efforts has come from a variety of sources, including a large matching grant from the National Forest Foundation and small, individual donations, which totaled \$26,000 from Aug. 2 through Dec. 31, 2002.

As the 2003 fire season begins, CUSP will continue to manage the flow of information about the fire, maintain an e-mail newsletter about fire-related issues and orchestrate volunteer restoration efforts.



Photograph provided by CUSP

CUSP volunteer participates in fire rehabilitation efforts

Preventing future fires is also a high priority.

According to CUSP's executive director, Carol Ekarius,
"Since 1996, 21 percent of the montane forest in the Upper
South Platte watershed has burned, and the remaining 79
percent is ready to."

In addition to its fire-related activities, CUSP continues its general watershed restoration work and its environmental education efforts.

When asked how CUSP was able to successfully undertake such a large and unexpected effort, Ekarius pointed to the relationships established through the assessment and strategic planning work conducted prior to the fires and HayRAC.

She noted that if CUSP had not existed, it would have taken a great deal of time to create such a group.

Ultimately, she said, "The strength of the organization is having people who trust the people around them."

For more information, visit the CUSP Web site at www.uppersouthplatte.net

Coalition for the Upper South Platte gets \$600,000 grant

The Coalition for the Upper South Platte is one of 20 watershed organizations in the United States that will share nearly \$15 million in grants as part of a new federal Watershed Initiative announced May 2.

CUSP will receive \$600,000 to provide organizational capacity building, enhance post-fire recovery and restoration efforts, protect remaining unimpaired streams and wetlands, and promote volunteer-driven restoration and clean-up efforts, according to the U.S. Environmental Agency.

Massive sedimentation in the South Platte and its tributaries resulted after extensive wildfires, which included the 2002 Hayman fire, the agency said.

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Editor, Cynthia Peterson

Copy Editor, Laurie DiBattista

Colorado Water Protection Project 1410 Grant Street, Suite B204 Denver, CO 80203

Denver - (303) 861-5195

Colorado - 1 (888) 861-9969

Fax - (303) 837-9917

E-mail - info@ourwater.org

Web site - www.ourwater.org

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The Colorado NPS Connection provides timely information about nonpoint source issues to interested groups, agencies and individuals. It does not necessarily reflect the views or opinions of the League of Women Voters of Colorado Education Fund or project funders. Articles for publication may be submitted via e-mail to info@ourwater.org for consideration.

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SAVE THESE DATES!

2003 Nonpoint Source Forum September 10, 2003

Noon - 6:00 pm Ramada Inn, Glenwood Springs, CO

Topics will include:

- Watershed Planning
- Effective BMPs
- Funding a Watershed Plan
- Stream Restoration and Water Quality
- Monitoring is a Dirty Word!

For more information contact Laurie Fisher at 303-692-3570 e-mail laurie.fisher@state.co.us

Watershed Impacts of Wildland Fire Symposium

October 21-23, 2003

Location TBD, Metropolitan Denver Area
The synposium will focus on on the erosion, debris
flow, flooding, and resulting water quality impacts of
wildland fire. Two days of technology-transfer sessions will be followed by a full-day field session in
the Hayman-Buffalo Creek fire area.

For more information contact Diane Matt at 303-357-1014 e-mail dmatt@geosociety.org www.geosociety.org/meetings/03fire

14th Annual South Platte Forum

October 22-23, 2003

Raintree Plaza, Longmont, CO

Topics will include:

- Planning for an Uncertain Future
- Rural Economics Thirsting for Water
- We're All Tapped Out
- Will You Take a Rain Check from the Water Bank?
- Just How Abrasive IS Gravel?
- Crispy Critters Past, Present & Future
 For more information contact
 Jennifer Brown at (970) 213-1618
 e-mail jennifer@jjbrown.com
 http://southplatte.jjbrown.com



Trading Places

Water industry lawyer Mark Pifher settles into public service role

by Laurie DiBattista

Imagine starting a high profile job only to discover that a chunk of the budget you anticipated overseeing had evaporated into thin air.

That was the situation Mark Pifher found himself in at about the time that he took over the reins of the Colorado Water Quality Control Division (WQCD) late last year.

Colorado's lagging economy meant severe government cutbacks.

"The biggest event since I started work here was the removal of all of our general fund dollars," said Pifher, director of the division. "When we lost it all, we had only 10 days to come up with a (legislative) bill" aimed at generating the lost funding.

That bill, titled SB03-276 Cash Funding Water Quality Programs, was signed into law May 1. It features an increase in wastewater permit fees and new drinking water permit fees, according to Pifher, who says the fees will "backfill the loss of general funds."

Much of the WQCD's \$10 million-plus 2003 budget is derived from federal funding.

Now that Pifher has ensured the division – with about 110 employees in Denver, Pueblo and Grand Junction – has the dollars to operate, he has turned his attention to "looking at opportunities to become more efficient and do some minimal reorganization to meet priorities."

Some top priorities include implementing new U.S. Environmental Protection Agency Confined Animal

Feeding Operations regulations at the state level, and implementing Stormwater Phase II program, which deals with smaller cities of 100,000 population and less, and construction sites of five acres and less.

How does it feel for Pifher, a former water-industry lawyer in Colorado, to now be sitting at the other side of the table?

"After 23 years of practicing law, it is a terrific challenge and opportunity to lead a state office, and I wanted be involved in public policy issues," he said.



Photograph by Laurie DiBattista

As an attorney, he focused on a handful of cases each day; now his days as director are jam-packed with work on numerous water quality issues.

One top-of-mind issue for Pifher is pollutant trading. In January, the EPA announced adoption of its Water Quality Trading Policy, which offers incentives to encourage those who can easily, and cost-effectively, reduce pollutants. The new policy encourages a market approach involving any combination of nonpoint sources and point sources to improve water quality within watersheds.

Pifher's group is working on developing a similar policy in Colorado by year's end. "It would be more cost-effective, and would clean up sources that otherwise may not be cleaned up," he said.

Though Pifher has had more than two decades of experience with water quality issues as a lawyer, he landed in the field of environmental law quite by accident.

After working as a high school English teacher for two years, the Wisconsin native earned a law degree from the University of Wisconsin. The Milwaukee law firm that hired him needed someone to handle environmental cases. Pifher later moved to Grand Junction, before the oil shale bust, then relocated to the Front Range.

When it's time to unwind, Pifher might be found at a favorite fishing spot, no doubt appreciating the water quality.

Pollutant trading policy seen as a "win-win-win" situation

When Christine Todd Whitman, administrator of the U.S. Environmental Protection Agency, announced the new Water Quality Trading Policy in January, she gave an example of how it works.

"Within a particular watershed, you may have a farmer who can inexpensively reduce sediment and nutrient runoff by changing his farming practices, perhaps by reducing the use of fertilizer or planting a buffer strip next to a stream," she said.

"That same watershed may also contain a municipal wastewater treatment plant that would have to make a major capital investment to meet its phosphorus or nitrogen limits.

"Under our new Water Quality Trading Policy, the treatment plant could pay the farmer to make the changes at the farm that would achieve the same level of reductions, or better, the plant is required to achieve.

"This is a win-win-win situation. The farmer benefits from extra income. The treatment plant (and its rate payers) benefit from fewer expenses. And, what's most important, the watershed benefits because it is receiving less sediment and nutrient runoff, which means cleaner, purer water for all those who live within the watershed."

New NPS-related Materials

Stormwater Outreach Materials

EPA has developed a set of materials that state or local governments can customize and use in their own stormwater outreach campaigns. The electronic files contain space for officials to add their own contact information and inexpensively reproduce these materials. Included are materials for the general public, homeowners, construction site operators, and children.

You may order copies of the Stormwater Month Outreach Materials and Reference Documents CD (EPA 833-C-03-001) or printed copies of these materials free of charge via e-mail at npdesbox-request@epa.gov or fax to 202-564-6392. Include the words "Stormwater Month Materials" in your e-mail or fax. Or visit http://cfpub.epa.gov/npdes/stormwatermonth.cfm.

Updated Catalog of Federal Funding for Watershed Protection Now Online

EPA's recently updated Catalog of Federal Funding Sources for Watershed Protection is now online as an easy to use, searchable Web site. The Web site provides information for watershed practitioners and others on 84 Federal funding sources that may be available to help fund various watershed-related projects. The Web site address is http://www.epa.gov/watershedfunding.

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One issue \$40 Four issues \$120

Large - 4" x 3"

One issue \$65 Four issues \$200

For more information, contact Cynthia Peterson at (303) 861-5195 or cynthia@ourwater.org.

USGS studies effects of urbanization on Front Range stream ecosystems

by Lori Sprague

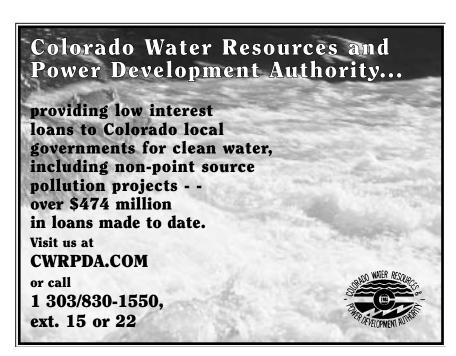
The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey (USGS) is investigating the effects of urbanization on surface-water quality and stream ecosystems in 14 metropolitan areas across the United States, including 28 sites along the Front Range of Colorado. This study will address timely questions about the impact of converting forested or agricultural lands to residential and commercial uses such as:

- As watersheds are urbanized, what is the magnitude and pattern of response in stream hydrology, water chemistry, and biological communities?
- How early in the process of urbanization does degradation of stream ecosystems occur?
- What are the susceptibilities of specific aquatic organisms to water-quality degradation caused by urbanization?
- What are the best measures to use for monitoring water quality in watersheds that are becoming increasingly urbanized?
- How do responses to urbanization vary among the diverse environmental settings in the U. S.?

In the South Platte River Basin, the study began in 2001 with the identification of 278 potential monitoring sites between Laramie County in Wyoming and Arapahoe County in Colorado. Twenty-eight sites ultimately were selected to minimize the variability in the natural settings (e.g., altitude, stream size, soil type, and climate) and allow the effects of urbanization to be more closely examined. These 28 sites include the cities of Cheyenne, Fort Collins, Loveland, Longmont, Boulder, Wheat Ridge, Westminster, Lakewood, Denver, Greenwood Village and points in between. As a result, the sites cover a range of urban intensity, allowing the response of stream ecosystems in relatively undisturbed areas to be compared to those in moderately and highly urbanized areas.

Field sampling began in the fall of 2002 and will continue through the summer of 2003. The sampling covers chemical (nutrients, pesticides, organic carbon, fecal bacteria), biological (fish, algae, macroinvertebrates), and physical (streamflow, water temperature, habitat) parameters. In addition, semipermeable membrane devices (SPMDs), designed to mimic the fatty tissue in aquatic organisms, will be deployed at the sites. The SPMDs will concentrate several organic contaminants that often are associated with urban settings but are difficult to detect in streams because they are present at very low concentrations. Even at such low concentrations, however, some of these contaminants may still be harmful to aquatic organisms because they accumulate in the organism's fatty tissue.

The results from this urbanization study will better define the interrelationships among surface-water quality, aquatic communities, and stream hydrology and habitat along Colorado's Front Range. Information on the magnitude and pattern of degradation of stream ecosystems will help urban planners and other stakeholders prioritize streams for restoration. In addition, understanding the effects of habitat disturbance as well as chemical contamination will help clarify the most appropriate strategy for managing, protecting and restoring urban streams.



Tools for watershed planning Part One

by Kim Larson, EPA Region 8 NPS project officer for Colorado

Watershed planning is a process to manage water resources that focuses on a whole watershed. It integrates sound science and social values, incorporates stakeholder involvement, and makes management decisions that are appropriate for local conditions.

Numerous watershed groups in the West and across the country focus their efforts on protecting and restoring water quality in the watersheds where they live. Each group may be concerned with a variety of problems or threats to many different watershed values such as degraded fisheries, loss of local scenic beauty, contaminated mine drainage and stream bank erosion. While each group has unique features, there is often one main commonality: the need to formulate goals based on watershed issues. Most often this is done through some kind of plan.

The watershed planning process varies depending on each watershed's unique characteristics, people and other factors. The scope and level of detail of plans that watershed groups develop and implement contrasts greatly depending on factors such as the complexity of the group's goals, the capacity of the group to create and carry out a plan, and community viewpoints.

One size does not fit all; each situation presents its own problems and opportunities. The watershed planning process is not a cookbook with consistent recipes for success, and it's not a set of rigid rules. Rather, it is a flexible framework for evaluating, integrating, and building support from numerous viewpoints and proposals. It is essentially a mutual quest to achieve shared goals.

While it is true that each watershed community is as different as the people who live there, and each watershed plan is a reflection of the desired future of the particular community, all planning efforts do share common traits. Generically, a watershed plan would likely:

1) Describe environmental problems, water quality trends, and sources of pollution;

- 2) Identify broad goals and objectives for water bodies of concern:
- 3) Set goals and priorities, and adopt an action plan for protecting and restoring water quality; and
- 4) Evaluate effectiveness of implemented actions in meeting goals.

Is your watershed group ready to take the plunge and develop a watershed plan? Wouldn't it be great to learn from others what works and what doesn't prior to starting the watershed planning effort? While planning for the future of an entire watershed can seem like an overwhelming task, remember you are not alone. Many watershed groups have developed, or are in the process of developing, watershed plans. There are many resources aimed at aiding citizens, local governments, Indian tribes and others interested in watershed planning, including training courses, technical experts, and planning guides and documents. Do some homework and research what has already been done and the task may not be so daunting. You will be better equipped to tackle the issues in your watershed.

One available resource is "Top 10 Watershed Lessons Learned," a list created by EPA and collaborated on by watershed practitioners across the nation. Here is an excerpt:

- 1. The best plans have clear visions, goals and action items.
 - 2. Good leaders are committed and empower others.
- 3. Having a coordinator at the watershed level is desirable.
- 4. Environmental, economic, and social values are compatible.
 - 5. Plans only succeed if implemented.
 - 6. Partnerships equal power.
 - 7. Good tools are available.
 - 8. Measure, communicate, and account for progress.
 - 9. Education and involvement drive action.
 - 10. Build on small success.

For more on each of these 10 points check out the full document on the Web at www.epa.gov/owow/watershed/lessons/index.html.

League of Women Voters of Colorado Education Fund

1410 Grant Street, Suite B204 Denver, CO 80203 NONPROFIT ORG. U.S. POSTAGE PAID DENVER CO PERMIT NO.233



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NONPOINT SOURCE RESOURCES

Nonpoint Source Coordinator

Laurie Fisher

- (303) 692-3570
- laurie.fisher@state.co.us

Agricultural Outreach Specialist

Randal Ristau

- (303) 692-3571
- randal.ristau@state.co.us

Information and Education Coordinator

Loretta Lohman

CSU Cooperative Extension

- (720) 913-5285
- llohman@coop.ext.colostate.edu

U.S. Environmental Protection Agency, Region VIII

Kim Bartels

• (303) 312-6212

Colorado Water Resources and Power Development Authority

- (303) 830-1550 ext. 15 or 22
- www.cwrpda.com

COLORADO WATERSHED COORDINATORS

Arkansas/Rio Grande Basins

Kathleen Reilly

- (303) 692-3573
- · kathleen.reilly @state.co.us

Upper Colorado Basin

Bill McKee

- (303) 692-3583
- bill.mckee@state.co.us

Lower South Platte Basin

Randal Ristau

- (303) 692-3571
- randal.ristau@state.co.us

Lower Colorado Basin

Dan Beley

- (303) 692-3606
- daniel.beley@state.co.us

RESOURCES

Citizen's Guide to Colorado Water Law

This 36-page booklet explores the basics of Colorado water law, how it has developed, and how it is applied today.

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Colorado Foundation for Water Education, www.cfwe.org

A River's Journey CD-ROM

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